CROSS REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Patent Application No. 60/196,297, entitled "NETWORK ARCHITECTURE, SYSTEMS, AND METHODS," filed on April 12, 2000, the disclosure of which is expressly incorporated herein by reference in its entirety, and is a continuation in part of U.S. Patent Application No. 09/814,178, entitled "METHOD AND SYSTEM FOR MANAGING AND CONFIGURING VIRTUAL PRIVATE NETWORKS," filed March 22, 2001, Attorney Docket No. 07937-0002, which is also expressly incorporated herein by reference in its entirety. The present application also relates to U.S. Patent Application No. (09/832363), entitled "METHODS AND SYSTEMS FOR HAIRPINS IN VIRTUAL NETWORKS," filed April 11, 2001, Attorney Docket No. 07937-0002-02; U.S. Patent Application No. (09/832362), entitled "METHODS AND SYSTEMS FOR USING NAMES IN VIRTUAL NETWORKS," filed April 11, 2001, Attorney Docket No. 07937-0002-03; U.S. Patent Application No. (09/832341), entitled "METHODS AND SYSTEMS FOR MANAGING VIRTUAL ADDRESSES FOR VIRTUAL NETWORKS," filed April 11, 2001, Attorney Docket No. 07937-0002-04; U.S. Patent Application No. (09/832345), entitled "METHODS AND SYSTEMS FOR PROVIDING NETWORK SERVICES USING AT LEAST ONE PROCESSOR INTERFACING A BASE NETWORK," filed April 11, 2001, Attorney Docket No. 07937-0002-06; U.S. Patent Application No. (09/832346), entitled "METHODS AND SYSTEMS FOR ENABLING COMMUNICATION BETWEEN A PROCESSOR AND A NETWORK OPERATIONS CENTER," filed April 11, 2001, Attorney Docket No. 07937-0002-07; and U.S. Patent

Application No. (09/832,353   ), entitled "METHODS AND SYSTEMS FOR AN EXTRANET," filed April 11, 2001, Attorney Docket No. 07937-0002-09, all of which are expressly incorporated herein by reference in their entirety and concurrently filed herewith the present application.

DESCRIPTION OF THE INVENTION

Field of the Invention

The present invention relates to systems and methods for controlling networks, and in particular, to systems and methods for implementing virtual private networks.

Background of the Invention

Wide area networks allow users to access company files and computer programs, regardless of where users are geographically located. Until recently, building wide area networks remained the province of only the largest corporations or companies with enough technical skill and financial resources. Organizations have used a range of approaches to building wide area networks to connect remote offices, partners, or employees. These "traditional" approaches to connectivity include, for example, point-to-point leased lines, packet switched networks, and dedicated virtual private networks (VPNs).

Point-to-point leased lines are physical networks requiring the engineering of separate links between sites that need to communicate with each other. Point-to-point leased lines can take from 30 to 90 days to install and are costly.

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